CLAIMS

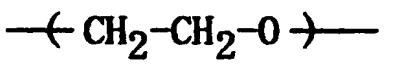
1. A polymer electrolyte composition characterized by comprising:

(1) a crosslinked material of a polyether binary copolymer which has a main chain comprising repeating units of the formula (i) and crosslinking units of the formula (ii) and which has a weight-average molecular weight of 10^4 to 10^7,

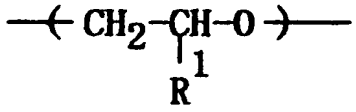
(2) an electrolyte solution comprising an aprotic organic solvent,

(3) an additive, as an optical ingredient, which comprises an ether compound having an ethylene oxide unit, and

(4) an electrolyte salt compound comprising a lithium salt compound.



(i)



(ii)

wherein R^1 is an ethylenically unsaturated group having an ester linkage.

2. The polymer electrolyte composition according to claim 1, wherein the repeating units of the formula (ii) is

crosslinkable component derived from glycidyl acrylate or glycidyl methacrylate.

3. The polymer electrolyte composition according to claim 1, wherein the weight-average molecular weight of the polyether binary copolymer is within the rage from 10^5 to 5 x 10^6.

4. The polymer electrolyte composition according to claim 1, which comprises 80 to 99.5 mol% of the units of the formula (i) is from and 0.5 to 20 mol% of the units of the formula (ii).

5. A battery comprising the polymer electrolyte composition according to anyone of claims 1 to 4, a positive electrode and a negative electrode.